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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/287,632      04/07/99      WATERHOUSE

021839      HM12/0721  
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/287,632

Applicant(s)  
Peter Michael Waterhouse, et al.

Examiner  
Amy Nelson

Group Art Unit  
1638



☒ Responsive to communication(s) filed on Apr 7, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 0 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-38 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☐ Claim(s) \_\_\_\_\_ is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-38 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claim 1, drawn to method of reducing phenotypic expression in a host cell by transformation with stem-loop DNA, classified in class 435, subclass 468, for example.
  - II. Claims 2-12, 22, and 23, drawn to method of reducing phenotypic expression in a host cell by transformation with DNA encoding hairpin RNA, and transformed host cell, classified in class 435, subclass 419, for example.
  - III. Claim 13, drawn to method of reducing phenotypic expression in a host cell by introduction of hairpin RNA, classified in class 435, subclass 468, for example.
  - IV. Claims 14-20, and 24-29, drawn to method of reducing phenotypic expression in a host cell by cotransformation with sense DNA and antisense DNA, transformed host cell, and transgenic plant, classified in class 800, subclass 298, for example.
  - V. Claim 21, drawn to method of identifying phenotype in a host cell by introduction of hairpin RNA, classified in class 47, subclass 58.1, for example.
  - VI. Claims 30-38, drawn to method for modifying the fatty acid profile in plant oil, classified in class 800, subclass 281, for example.

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2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with stem-loop DNA of Group I and the method of reducing phenotypic expression in a host cell by transformation with DNA encoding hairpin RNA of Group II have different starting materials and different method steps, and therefore are not related. Also, the transformed host cell of Group II cannot be made by the method of Group I.

3. Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with stem-loop DNA of Group I and the method of reducing phenotypic expression in a host cell by introduction of hairpin RNA of Group III have different starting materials and different method steps, and therefore are not related.

4. Inventions I and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with stem-loop DNA

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of Group I and the method of reducing phenotypic expression in a host cell by cotransformation with sense DNA and antisense DNA of Group IV have different starting materials and different method steps, and therefore are not related. Also, the transformed host cell and transgenic plant of Group IV cannot be made by the method of Group I.

5. Inventions I and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with stem-loop DNA of Group I and the method of identifying phenotype in a host cell by introduction of hairpin RNA of Group V have different starting materials, different method steps, and different purposes, and therefore are not related.

6. Inventions I and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with stem-loop DNA of Group I and the method for modifying the fatty acid profile in plant oil of Group VI have different starting materials, different method steps, and different purposes, and therefore are not related.

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7. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with DNA encoding hairpin RNA of Group II and the method of reducing phenotypic expression in a host cell by introduction of hairpin RNA of Group III have different starting materials and different method steps, and therefore are not related. Also, the transformed host cell of Group II cannot be made by the method of Group III.

8. Inventions II and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with DNA encoding hairpin RNA of Group II and the method of reducing phenotypic expression in a host cell by cotransformation with sense DNA and antisense DNA of Group III have different starting materials and different method steps, and therefore are not related. Also, the transformed host cell of Group II cannot be made by the method of Group IV, and the transformed host cell and transgenic plant of Group IV cannot be made by the method of Group II.

9. Inventions II and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the

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method of reducing phenotypic expression in a host cell by transformation with DNA encoding hairpin RNA of Group II and the method of identifying phenotype in a host cell by introduction of hairpin RNA of Group III have different starting materials, different method steps, and different purposes, and therefore are not related. Also, the transformed host cell of Group II cannot be made by the method of Group V.

10. Inventions II and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by transformation with DNA encoding hairpin RNA of Group II and the method for modifying the fatty acid profile in plant oil of Group VI have different starting materials, different method steps, and different purposes, and therefore are not related.

11. Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, method of reducing phenotypic expression in a host cell by introduction of hairpin RNA of Group III and the method of reducing phenotypic expression in a host cell by cotransformation with sense DNA and antisense DNA of Group IV have different starting materials and different method steps, and therefore are not related. Also, the transformed host cell and transgenic plant of Group IV cannot be made by the method of Group III.

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12. Inventions III and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by introduction of hairpin RNA of Group III and the method of identifying phenotype in a host cell by introduction of hairpin RNA of Group V have different method steps and different purposes, and therefore are not related.

13. Inventions III and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by introduction of hairpin RNA of Group III and the method for modifying the fatty acid profile in plant oil of Group VI have different starting materials, different method steps, and different purposes, and therefore are not related.

14. Inventions IV and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by cotransformation with sense DNA and antisense DNA of Group IV and the method of identifying phenotype in a host cell by introduction of hairpin RNA of Group V have different starting materials, different method steps, and different purposes, and therefore are not related. Also, the transformed host cell and transgenic plant of Group IV cannot be made by the method of Group V.



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15. Inventions IV and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of reducing phenotypic expression in a host cell by cotransformation with sense DNA and antisense DNA of Group IV and the method for modifying the fatty acid profile in plant oil of Group VI have different starting materials, different method steps, and different purposes, and therefore are not related.

16. Inventions V and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the method of identifying phenotype in a host cell by introduction of hairpin RNA of Group V and the method for modifying the fatty acid profile in plant oil of Group VI have different starting materials, different method steps, and different purposes, and therefore are not related.

17. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, recognized divergent subject matter, and because the search required for one of the groups is not required for another, restriction for examination purposes as indicated is proper.

18. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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19. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy J. Nelson whose telephone number is (703) 306-3218. The examiner can normally be reached on Monday-Friday from 8:00 AM - 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Paula Hutzell, can be reached at (703) 308-4310. The fax phone number for this Group is (703) 308-4242 or (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application, or if the examiner cannot be reached as indicated above, should be directed to the Group receptionist whose telephone number is (703) 308-1234.



**AMY J. NELSON, PH.D**  
**PRIMARY EXAMINER**

Amy J. Nelson, Ph.D.

July 20, 2000